What is Claimed is:

- A method for processing incoming data by a storage controller with a buffer controller coupled to a buffer memory, comprising:
- 5 evaluating incoming data block size;
 determining if the incoming data requires
 padding; and
 padding incoming data such that the incoming
 data can be processed by the buffer
 10 controller.
- controller.
 - .2. The method of Claim 1, wherein the incoming data after being padded may be stored in the buffer memory.
- The method of Claim 1, wherein the buffer
 controller pads incoming data in real time before being stored in the buffer memory.
 - 4. A method for reading data from a buffer memory operationally coupled to a storage controller through a buffer controller, comprising:
- 20 determining if any pads need to be removed from the data; and removing pads from the data read from the buffer memory.
- 5. The method of Claim 4, wherein the pads are removed so that data can be processed using a storage controller interface.
 - 6. A storage controller, comprising:

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- a buffer controller that can be set in a mode to receive any MOD size data and includes a first channel with a FIFO for receiving incoming data via a first interface, wherein the incoming data is padded so that it can be stored in a buffer memory.
- The storage controller of Claim 6, wherein padding may also be removed from data that is read from the buffer memory.
- 8. The storage controller of Claim 6, wherein the

 10 buffer controller mode for receiving incoming data
 can be set by firmware.
 - 9. A system having a storage controller operationally coupled to storage device, comprising: a buffer controller that can be set in a mode to receive any MOD size data and includes a first channel with a FIFO for receiving incoming data via a first interface, wherein the incoming data is padded so that it can be stored in a buffer memory.
- 10. The storage controller of Claim 9, wherein padding 20 may also be removed from data that is read from the buffer memory.
 - 11. The storage controller of Claim 9, wherein the buffer controller mode for receiving incoming data can be set by firmware.

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